

AMENDMENTS TO THE CLAIMS

Claim 1 (original) A sterile dialysis concentrate composition for use in a dialysis solution comprising sodium chloride (NaCl) 90.72 ± 9.0 g/l, magnesium chloride (MgCl₂) 2.05 ± 0.2 g/l, and sodium bicarbonate (NaHCO₃) 28.35 ± 2.8 g/l.

Claim 2 (original) A kit for preparing a dialysis solution comprising the sterile dialysis concentrate composition of claim 1 and optionally instructions for its use.

Claim 3 (original) The kit of claim 2 further comprising sterile water sufficient to dilute the concentrate to a solution comprising Na 140 ± 14 mmol/l, Mg 0.75 ± 0.07 mmol/l, Cl 116.5 ± 11 mmol/l, and HCO₃ 25.0 ± 2.5 mmol/l.

Claim 4 (original) A method of preparing a sterile dialysis solution comprising diluting a sterile, dialysis concentrate composition of claim 1 in a sufficient amount of sterile water to prepare a dialysis solution comprising Na 140 ± 14 mmol/l, Mg 0.75 ± 0.07 mmol/l, Cl 116.5 ± 11 mmol/l, and HCO₃ 25.0 ± 2.5 mmol/l.

Claim 5 (original) A method for providing continuous renal replacement therapy to a patient comprising administering a sterile dialysis solution prepared according to the method of claim 4 in conjunction with a regional citrate anti-coagulant solution to a patient in need thereof.

Claim 6 (currently amended) A method of preparing a sterile dialysis solution or infusate comprising diluting a sterile, dialysis concentrate composition of claim 1 in a sufficient amount of sterile water to prepare an infusate comprising Na 140 ± 14 mmol/l, Mg 0.75 ± 0.07 mmol/l, Cl 116.5 ± 11 mmol/l, and HCO₃ 25.0 ± 2.5 mmol/l.

Claim 7 (original) A method for treating acute renal failure in a critically ill patient without introducing calcium into the blood removed from the patient during dialysis comprising administering a sterile dialysis solution prepared according to the method of claim 6 in conjunction with a regional citrate anti-coagulant solution to a patient in need thereof.

Claim 8 (original) A method for providing hemofiltration to a patient comprising administering a sterile infusate prepared according to the method of claim 6 in conjunction with a regional citrate anti-coagulant solution to a patient in need thereof.

Claim 9 (original) A sterile dialysis solution comprising the concentrate as claimed in claim 1 and a physiologically acceptable diluent.

Claim 10 (original) A sterile dialysis solution according to claim 9 comprising Na 140 ± 14 mmol/l, Mg 0.75 ± 0.07 mmol/l, Cl 116.5 ± 11 mmol/l, and HCO₃ 25.0 ± 2.5 mmol/l.

Claim 11 (currently amended) A ~~use~~ method of preparation of a sterile calcium-free bicarbonate concentrate according to claim 1 ~~for preparing as~~ an infusate for hemofiltration.

Claim 12 (currently amended) A ~~use~~ method of preparation of a sterile, calcium free bicarbonate concentrate according to claim 1 ~~for preparing as~~ a dialysis solution for use in metabolic acidosis.

Claim 13 (new) A method for correcting bicarbonate levels in a patient during dialysis comprising providing a dialysate mixture having a bicarbonate level sufficiently low so as to minimize the risk of metabolic complication in the patient, preferably between 20-30 mmol/litre, wherein should the patient's bicarbonate level drop below the preferred level, bicarbonate diffuses from the dialysate across the semipermeable membrane to the patient to correct the problem, and wherein if there is an excess of bicarbonate in the blood of the patient then bicarbonate diffuses from the blood to the dialysate to correct the problem.

Claim 14 (new) A sterile calcium free low bicarbonate concentrate containing magnesium sodium, chloride, and a concentration of bicarbonate sufficiently low so as to minimize the risk of metabolic complications in a patient and for continuous renal replacement therapies such as dialysis and hemofiltration, wherein the bicarbonate level in the resulting dialysis solution is within the range of about 5-30 mmol/litre.

Claim 15 (new) A method for treating acute renal failure in a critically ill patient comprising dialyzing blood from the patient, without introducing calcium into the blood removed from

the patient during dialysis, by using a sterile dialysis solution having a bicarbonate concentration within the range of about 5-30 mmol/litre.

Claim 16 (new) The method of claim 15 wherein the solution further comprises at least one of potassium, glucose, and ketones such as b hydroxy-butyrate.

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Claim 17 (new) A sterile dialysis concentrate, for use in the preparation of a dialysis solutions, having a bicarbonate level sufficiently low so as to minimize the risk of metabolic complications in a patient and comprising sodium chloride, magnesium chloride, and sodium bicarbonate at a concentration in the dialysis solution within the range of about 5-30 mmol/litre.